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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte JAE-SEOK JANG, SEOK-BIN IM, and HAN-UP BAE

Appeal 2016-008645 Application 11/999,176 Technology Center 3600

Before JOHN A. JEFFERY, BRUCE R. WINSOR, and JUSTIN BUSCH, Administrative Patent Judges.

WINSOR, Administrative Patent Judge.

DECISION ON APPEAL

Pursuant to 35 U.S.C. § 134(a), Appellants¹ appeal from the Examiner's decision to reject claims 1, 3, 4, 13, 15–17, 19, 25, and 27–30, which constitute all the claims pending in this application. We have jurisdiction under 35 U.S.C. § 6(b). Claims 2, 5–12, 14, 18, 20–24, and 26 were cancelled.

We affirm.

App. Br. 3.

¹ Appellants identify the real party of interest as KT Corporation.

STATEMENT OF THE CASE

The Invention

Appellants' disclosed invention "relates to . . . a method and apparatus for providing and processing [a] digital contents package or period-based flat rate service digital contents using DRM [digital rights management]." Spec. ¶ 2. Claim 1, which is illustrative, reads as follows:

1. A method for providing digital rights management (DRM)-based content package from a DRM-based content providing server to a user terminal comprising:

receiving from a user terminal a request for a DRM-based content package in a DRM-based content providing server, wherein the DRM-based content package comprises a plurality of individual contents;

detecting within the content providing server the individual contents comprising the requested content package;

generating a single content package right object to be commonly applied to all of the detected individual contents in the requested content package;

encoding each of the individual contents using the single content package right object;

generating content transmitting information containing the encoded individual contents and the single content package right object, wherein the single content package right object includes key information to be commonly used for decoding the encoded individual contents contained in the content transmitting information, and a usable period of the content package;

transmitting the content transmitting information to the requesting user terminal; and

renewing an expiration date of the single content package right object included in the content transmitting information and transmitting the renewed expiration date to the user terminal when a right object of the individual contents expires, the individual contents being requested by the user.

The Rejections²

Claims 1, 3, 4, 13, 15–17, 19, 25, and 27–30 stand rejected under 35 U.S.C. § 101 as being directed to ineligible subject matter. *See* Final Act. 4

Claims 1, 3, 4, 13, 15–17, 19, 25, and 27–30 stand rejected under 35 U.S.C. § 103(a)³ as being unpatentable over Stefik et al. (US 2002/0128856 A1, Sept. 12, 2002 ("Stefik")) and Kawamoto et al. (US 2004/0210762 A1, Oct. 21, 2004 ("Kawamoto")). *See* Final Act. 5–12.

The Record

Rather than repeat the arguments here, we refer to the Briefs ("App. Br." filed Jan. 22, 2016; "Reply Br." filed Sept. 15. 2016) for the positions of Appellants; the Advisory Action ("Adv. Act." mailed Apr. 13, 2016), the Final Office Action ("Final Act." mailed Apr. 29, 2015), and the Examiner's Answer ("Ans." mailed July 15, 2016) for the reasoning, findings, and conclusions of the Examiner; and the Specification ("Spec." filed Dec. 3, 2007). Only those arguments actually made by Appellants have been considered in this decision. Arguments that Appellants did not make in the

pargraph. Ans. 2; Adv. Act. 1.

² Claims 13, 15–17, 19, and 27–30 had been rejected under 35 U.S.C. § 112, second paragraph as being indefinite. Final Act. 3. The Examiner has withdrawn the rejection of these claims under 35 U.S.C. § 112, second

³ All prior art rejections are under the provisions of 35 U.S.C. in effect before the effective date of the Leahy-Smith America Invents Act of 2011 ("pre-AIA"). Final Act 2.

Briefs have not been considered and are deemed to be waived. *See* 37 C.F.R. § 41.37(c)(1)(iv) (2015).

ISSUES

The issues presented by Appellants' arguments are as follows:

Does the Examiner err in concluding claim 1 is directed to an abstract idea under the first step of the analysis set forth in *Mayo Collaborative Services v. Prometheus Laboratories, Inc.*, 132 S. Ct. 1289 (2012) and *Alice Corp. Party Ltd. v. CLS Bank International*, 134 S. Ct. 2347 (2014)?⁴

Does the Examiner err in finding the combination of Stefik and Kawamoto teaches or suggests "generating a single content package right object to be commonly applied to all of the detected individual contents in the requested content package" (hereinafter the "argued limitation"), as recited in claim 1?

ANALYSIS

Rejection under 35 U.S.C. § 101

The Examiner finds "[t]he claims are directed to an abstract idea of providing a digital rights management (DRM) package, which is a certain method of organizing human activity and an idea of itself." Ans. 3. The Examiner further finds the claims "do not add a meaningful limitation because they can be performed by a human mind and/or with pen and paper (generating a right object, encoding contents with key information, renewing

⁴ Appellants' arguments present additional issues under § 101. However, because the identified issue is dispositive of the appeal under § 101, we do not reach the additional issues under § 101.

the expiration dat[e]); and relate to managing a transaction between people (i.e. user and server) and sales activity." *Id.* at 5.

Appellants contend the claims do not correspond to the typical DRM technology in which "a right object is individually generated per digital content, and therefore a plurality of right objects are generated, transmitted (to a user terminal), and managed." App. Br. 11 (emphases omitted); Reply Br. 5. According to Appellants, contrary to the typical DRM technology, and "in the present claims, . . . only a single content package right object is generated for the plurality of contents, is commonly used for encoding/decoding each of the plurality of contents, and is transmitted to the user terminal." Reply Br. 5 (emphases omitted). Appellants conclude "each element or step in the present claims is not a certain method of organizing human activity and an idea of itself. In other words, it is believed that the present claims are not directed to an abstract idea, and therefore qualify as eligible subject matter." App. Br. 12 (emphases omitted). We agree.

To be eligible under 35 U.S.C. § 101, the subject matter of an invention must be a "new and useful process, machine, manufacture, or composition of matter, or [a] new and useful improvement thereof." 35 U.S.C. § 101. The Supreme Court has held there are implicit exceptions to the categories of patentable subject matter identified in § 101, including (1) laws of nature, (2) natural phenomena, and (3) abstract ideas. *Alice*, 134 S. Ct. at 2355. Further, the Court has "set forth a framework for distinguishing patents that claim [1] laws of nature, [2] natural phenomena, and [3] abstract ideas from those that claim patent-eligible applications of those concepts." *Id.* (brackets added) (citing *Mayo*, 132 S. Ct. 1289). The evaluation follows the two-part analysis set forth in *Mayo*: 1) determine

whether the claim is directed to an abstract idea; and 2) if the claim is directed to an abstract idea, determine whether any element, or combination of elements, in the claim is sufficient to ensure that the claim amounts to significantly more than the abstract idea itself. *See Alice*, 134 S. Ct. at 2350.

Claim 1 is directed to a process, which is one of the four statutory classes. Following the Court's guidance, we turn to the first step of the *Mayo/Alice* analysis to determine if the claim is directed to one of the judicial exceptions, i.e., an abstract idea. According to *Alice* step one, "[w]e must first determine whether the claims at issue are *directed to* a patent-ineligible concept," such as an abstract idea. *Alice*, 134 S. Ct. at 2355 (emphasis added). "[T]he 'directed to' inquiry applies a stage-one filter to claims, considered in light of the specification, based on whether 'their character as a whole is directed to excluded subject matter." *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335 (Fed. Cir. 2016) (quoting *Internet Patents Corp. v. Active Network, Inc.*, 790 F.3d 1343, 1346 (Fed. Cir. 2015)).

The Specification discusses the problem to be solved by the invention—allowing a user to conveniently access a content package's digital contents using DRM technology. Spec. ¶ 8. According to the Specification, the current DRM technology faces obstacles due to assigning one right object for each digital content of a content package having many digital contents—the load of content providing servers is increased, the memory efficiency of a user terminal is deteriorated, and the inconvenience of having to change all right objects if a user intends to extend their periods. *Id.* ¶¶ 36–40. According to the Specification, the inventors solved the problem by generating only a single right object representing all of the

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packaged contents of a content package. *Id.* ¶ 55. By generating a single right object representing all of the packaged contents, memory use efficiency can be improved. *Id.* ¶¶ 82, 140.

Here, claim 1 recites three distinct steps: (1) receiving from a user terminal a request for a DRM-based content package comprising individual contents; (2) generating a single content package right object to commonly encode each of the individual contents; and (3) transmitting the encoded individual contents and the single content package right object including key information for purposes of decoding.

Our reviewing court addressed improvements to computer-related technology:

Software can make non-abstract improvements to computer technology just as hardware improvements can, and sometimes the improvements can be accomplished through either route. We thus see no reason to conclude that all claims directed to improvements in computer-related technology, including those directed to software, are abstract and necessarily analyzed at the second step of *Alice*, nor do we believe that *Alice* so directs. Therefore, we find it relevant to ask whether the claims are directed to an improvement to computer functionality versus being directed to an abstract idea, even at the first step of the *Alice* analysis.

Enfish, 822 F.3d at 1335.

At the outset, we note in passing "[e]ncryption, in general, represents a basic building block of human ingenuity that has been used for hundreds, if not thousands, of years. . . . Specifically, encryption, in its simplest form, could be performed with pencil and paper." *Fidelity Nat'l Info. Servs., Inc. v. DataTreasury Corp.*, 2015 WL 1967328, at *7 (PTAB 2015), *aff'd*, 2016 WL 5939431 (Fed. Cir. 2016).

But here, in light of the Specification discussed above, we agree with Appellants that claim 1 is not directed to an abstract idea. That is, we find claim 1 at issue here bears a substantial similarity to claim 1 of U.S. Patent No. 6,154,844 ("the '844 patent") that our reviewing court determined patent eligible. See Finjan, Inc. v. Blue Coat Sys., Inc., 879 F.3d 1299, 1303 (Fed. Cir. 2018). Similar to the functionality of the '844 patent's claim 1 in Finjan, Appellants' claim 1 involves receiving a user's DRM-based content package request (analogous to the '844 patent's Downloadable), generating a single content package right object (analogous to the '844 patent's first Downloadable security profile) that identifies the requested content package's individual contents, and linking the single content package right object to the user's DRM-based content package request. As discussed above, claim 1's operation is distinguished from known DRM technology that is limited to assigning "a single content package right object to be commonly applied to all of the detected individual contents in the requested content package" (claim 1). As such, "the focus of [claim 1] is on the specific asserted improvement in computer capabilities . . . [rather than] on a process that qualifies as an 'abstract idea' for which computers are invoked merely as a tool." Enfish, 822 F.3d at 1335–36. That is, claim 1 employs a new kind of content package right object that enables the computer to employ DRM technology to do things it could not do before. Thus, Appellants' claims are directed to a non-abstract improvement in computer functionality, rather than a method of organizing human activity or an idea of itself.

"Because we find the claims are not directed to an abstract idea, we need not proceed to step two." *Thales Visionix Inc. v. United States*, 850

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F.3d 1343, 1348 (Fed. Cir. 2017) (citing *Alice*, 134 S. Ct. at 2355; *Enfish*, 822 F.3d at 1339).

Accordingly, we do not sustain the rejection under 35 U.S.C. § 101 of (1) claim 1; (2) independent claims 4, 13, and 16, each of which includes limitations substantially similar to the limitations discussed *supra* (*compare* App. Br. 17 (Claims App'x), *with id.* at 17–19) and was rejected on substantially the same basis as claim 1 (*see* Final Act. 4); and (3) claims 3, 15, 17, 19, 25, and 27–30, which variously depend from claims 1, 4, 13, and 16.

Rejection under 35 U.S.C. § 103

The Examiner finds Stefik, when combined with Kawamoto, teaches the argued limitation of claim 1. Final Act. 5–6; Ans. 7–8. According to the Examiner, "under the broadest reasonable interpretation, Stefik discloses [a single content package right object.]" Ans. 7.

Specifically, the Examiner finds

[u]nder the broadest reasonable interpretation, the claim limitation requires generating a *single right* to be applied to all the contents. Having multiple d-blocks with corresponding right portions does not preclude a single right from being applied to all the d-blocks. Stefik discloses a single right (usage rights, see [0062]) to be applied to all the contents (the usage rights will be the same for an entire digital work, see [0062]). In other words, all the usage rights for the contents of a package are the same (i.e. a usage right has been applied to all the contents, e.g. print, view, play).

Ans. 7–8.

Appellants contend that "[i]n light of the <u>claim language</u> and the original [S]pecification, it is interpreted that in the present claims, <u>only</u> a

single content package right object is **generated**, **used** (to encode/decode), and transmitted for a plurality of contents." Reply Br. 8 (citing Spec. ¶ 70, Fig. 6). Appellants further contend that "in the present claims, a DRM-based content providing server does **not generate** 'a plurality of **same** right objects' to be **individually** applied to each of a plurality of different contents, and therefore does not **transmit** the plurality of same right objects to a user terminal." *Id*.

Appellants continue as follows:

Stefik explicitly discloses that <u>every</u> component part (descriptor block, for example d-blocks 1102–1104) has the <u>same structure</u>, and therefore <u>each</u> d-block has <u>its own right portion</u> although rights for a plurality of d-blocks are the same [as] each other. Therefore, in view of the specification and drawings of Stefik, it is believed that the expression "<u>the usage rights</u> may be the same for an entire digital work" in paragraph [0062] merely means that rights included in a plurality of right portions may be the same as each other. That is, it is believed that the expression "the usage rights may be the same . . . " in [0062] <u>cannot</u> be interpreted as the expression "<u>only a single right portion</u> is generated and included for an entire digital work."

Id. at 9 (alterations in original).

To resolve the question of patentability under § 103, we begin by construing the argued limitation of claim 1. Claim construction is an issue of law that is reviewed *de novo*. *Cordis Corp. v. Boston Scientific Corp.*, 561 F.3d 1319, 1331 (Fed. Cir. 2009). We give claims their broadest reasonable interpretation consistent with the Specification. *In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1369 (Fed. Cir. 2004). Although claims are interpreted in light of the Specification, "limitations are not to be read into the claims from the [S]pecification." *In re Van Geuns*, 988 F.2d 1181,

1184 (Fed. Cir. 1993). Accordingly, arguments must be commensurate in scope with the actual claim language. *In re Self*, 671 F.2d 1344, 1348 (CCPA 1982).

Appellants and the Examiner do not appear to disagree as to the meaning of a "right object." Here, the argued limitation of claim 1 recites "generating a *single* content package right object to be commonly applied to all of the detected individual contents in the requested content package." App. Br. 15 (Claims App'x) (emphasis added). The plain meaning of the term "single" is "one only." MERRIAM-WEBSTER'S COLLEGIATE DICTIONARY 1095 (10th ed. 1999). We therefore agree with Appellants that claim 1 requires one and *only one* single content package right object be commonly applied to all of the detected individual contents within a content package. App. Br. 8–9; Reply Br. 5–6.

However, although the argued limitation, by its plain language, precludes the existence of right objects other than the single content package right object that are *commonly applied to all* individual contents, it does not preclude the existence of right objects other than the single content package right object that are *applied to* individual contents. Appellants attempt to support their contention by pointing to an embodiment illustrated by Figure 6 of the present application in which *only one* package right object exists to represent all of the individual contents contained in the package content. *See* App. Br. 13; Reply Br. 8 (citing Spec. ¶ 70); *see also* Spec. ¶ 80 ("As described above, according to one embodiment of the present invention, only one package right object is used for all of the contents contained in the content package."). However, excluding the existence of other right objects is not recited in claim 1, and we decline to import a negative limitation into

the claim inferred from an embodiment of the Specification. *See Van Geuns*, 988 F.2d at 1184. Therefore, we conclude that the broadest reasonable interpretation of claim 1 does not preclude the existence of other right objects of each individual content when *only one* generated content package right object is *commonly applied to all* the individual contents.

The Examiner finds that Stefik teaches the argued limitation. *See* Ans. 7–8 (citing Stefik ¶ 62); *see also* Final Act. 5–6 (additionally citing Stefik ¶¶ 53–54). We agree with the Examiner's findings and adopt them as our own. Stefik is generally directed to a composite digital work having usage rights. Stefik, Abstract. Stefik's usage rights define the manner in which the composite digital work can be used and distributed. *Id.* ¶ 38. Stefik's composite digital work is composed of a hierarchy of component parts. *Id.* ¶¶ 51, 53–54, Figs. 5–6. Each of Stefik's component parts is represented by a descriptor block (d-block) that includes the component part's separate usage rights. *Id.* ¶ 54, Fig. 7. Examples of Stefik's usage rights include the right to print or view the composite work or component part. *Id.* ¶¶ 66–67, Fig. 11.

Stefik discloses that "[i]f the usage rights will be the same for an entire digital work, they could be associated when the digital work is processed for deposit in the digital work server." *Id.* ¶ 62. Thus, Stefik generates a set of usage rights to be *commonly applied to all* component parts (the claimed "detected individual contents") in the entire digital work (the claimed "requested content package"). Because Stefik does not disclose any other set of usage rights to be *commonly applied to all* component parts in the digital work, Stefik's set of usage rights, then, at least suggests being only one generated content package right object (the claimed "single content

package right object") to be commonly applied to all component parts in the entire digital work.

Appellants' contentions regarding Kawamoto's alleged shortcomings with respect to the argued limitation (App. Br. 14; Reply Br. 9–11)and other contentions pertaining to the argued limitation (Reply Br. 11), are unavailing in light of our finding that Stefik at least suggests the argued limitation, as discussed above.

Accordingly, we sustain the rejection under 35 U.S.C. § 103(a) of (1) claim 1; (2) independent claims 4, 13, and 16, which are argued together with (*see* App. Br. 12–15), or relying on the arguments for (*see id.* at 15), claim 1; and (3) claims 3, 15, 17, 19, 25, and 27–30, which variously depend, directly or indirectly, from claims 1, 4, 13, and 16 and were not separately argued with particularity (*see id.*).

DECISION

The Examiner's decision to reject claims 1, 3, 4, 13, 15–17, 19, 25, and 27–30 under 35 U.S.C. § 101 is reversed.

The Examiner's decision to reject claims 1, 3, 4, 13, 15–17, 19, 25, and 27–30 under § 103(a) is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 41.50(f).

<u>AFFIRMED</u>